

Veolia's Absolute.Za* reduces particle load in sulfuric acid for chemical processors

CASE STUDY | Chemical Processing

| Challenge

Chemical re-packaging companies must reduce the particle load in chemicals such as sulfuric acid when bottling bulk acid from drums and tanks. Due to its high viscosity, low pH and broad particle size distribution, sulfuric acid presents a number of challenges to these companies. In addition to these challenges, the acid must be filtered using a batch filtration process. When using a conventional filter, this becomes a problem because the filters must be changed during the batch process. Veolia's partners work with chemical processing companies to meet their sulfuric acid filtration needs.

| Solution

Veolia's Absolute.Za depth cartridge filter uses patented Z.Plex* technology (Figure 1) which is engineered specifically for absolute filtration. The filter composition incorporates small diameter fibers and an innovative 3-dimensional fiber matrix. Either 0.5, 1.0, 3.0 or 5.0 micron ratings are available depending on the water source and the fouling potential of the filter.



With its all polypropylene construction, the Absolute.Za cartridge filter has excellent chemical resistance and cleanliness. The high strength core also gives the cartridge the ability to withstand the high differential pressures imposed by the increased viscosity of the fluid and the need to complete a batch with minimal filter disruptions.

Absolute.Za filters have rigid end caps that ensure gasket and O-ring seals maintain integrity under increasing pressure drops. Due to the optimized depth filter matrix of the Absolute.Za, a wide distribution of particle sizes can be captured in the media without rapid pore plugging.

| Results

Absolute.Za cartridge filters were used to meet the particle level requirements of chemical processing customers with no filtration failures. The lack of failures was due to the filter strength and the ability to complete the chemical batch filtration without any interruption.

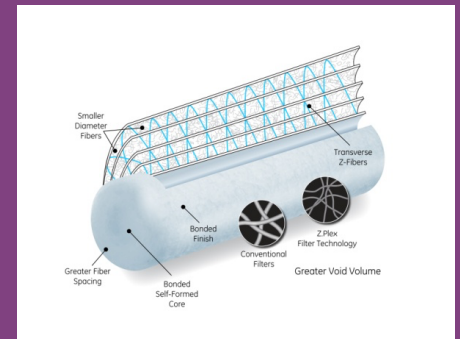


Figure 1: Patented Z.Plex Filter Technology
Patent Numbers: 6,916,395, 6,938,781, 6,986,427

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